ABSTRACT

[00078] Circuitry that generates an interface signal between a first and a second integrated circuit (IC). The circuitry includes a reference circuit that provides a reference signal, an interface circuit, and a circuit element. The interface circuit is implemented on the first IC, operatively couples to the reference circuit, receives the reference signal and a data input, and generates the interface signal. The circuit element is implemented on the second IC, operatively couples to the control circuit, receives the interface signal, and provides an output signal. The reference signal can be a voltage or a current signal, and can be generated in the first or second IC. The interface circuit can be implemented with a current mirror coupled to a switch array, and can be oversampled to ease the filtering requirement. The interface signal can be a differential current signal having multiple (e.g., four, eight, or more) bits of resolution. The circuit element can be, for example, a VGA, a modulator, or other circuits.